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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,217	07/30/2003	Nathaniel T. Becker	GC515-2-US-C1	8779

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EXAMINER

NAFF, DAVID M

ART UNIT	PAPER NUMBER
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1657

MAIL DATE	DELIVERY MODE
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05/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/630,217

Applicant(s)

BECKER ET AL.

Examiner

David M. Naff

Art Unit

1657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006 and 13 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Claims examined on the merits are 12-31, which are all claims in the application.

5 The text of those sections of Title 35, U.S. Code not included in
this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 12-31 are rejected under 35 U.S.C. 112, second paragraph,
as being indefinite for failing to particularly point out and
10 distinctly claim the subject matter which applicant regards as the
invention.

In the last line of claim 12, line 4 of claim 25, and line 5 of claim 29, "moderate or high water activity" is uncertain as to meaning and scope. Being "moderate" and "high" is relative and subjective.

15 *Response to Arguments*

The definition in the specification cannot limit the recitation in the claims, which can have a different meaning than in the specification.

Claim Rejections - 35 USC § 102

20 Claims 12-16 and 18-26 are rejected under 35 U.S.C. 102(b) as
being anticipated by Herdeman (4,707,287).

The claims are drawn to a granule having a protein core and a
25 hydrated barrier material coating over the protein core, and the
granule having a moderate or high water activity.

Art Unit: 1657

Herdeman discloses a granule having a enzyme core (col 5, line 5) that can be ALCALASE (col 6, line 10), a protective coating of alkaline buffer salt around the core (col 2, lines 15-35, and col 3, lines 43-47), a water-soluble nonionic waxy overcoating that can be polyethylene glycol, and a coating of acetate phthalate resin (col 2, lines 50-60, and col 7, lines 15-17). The granule has a moisture content of 3-10% (col 7, lines 10-11).

The granule of Herdeman is the same as presently claimed. When the granule of Herdeman has 3-10% water, the barrier will be hydrated, and the granule will have a water activity of moderate or high, or within ranges of dependent claims.

Response to Arguments

There is inadequate evidence to establish that the claimed granule is different and has a different activity, and that the granule of Herdeman does not have the claimed water activity. The granule of Herdeman inherently has a hydrated barrier coated.

Claim Rejections - 35 USC § 103

Claims 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herdeman in view of Painter et al (5,292,446) and Dychdala et al (3,793,216).

The claims require a hydrated inorganic salt as the barrier selected from salts that are a heptahydrate, dehydrate or tetrahydrate.

Painter et al disclose using sodium citrate dehydrate (col 9, lines 15-16) as an alkaline salt in a washing composition.

Art Unit: 1657

Dychdala et al disclose using different hydrated inorganic salts including sodium phosphate dibasic heptahydrate (col 3, lines 63-64) to provide a water content of 3-13% (col 91 line 29).

It would have been obvious to use as the alkaline buffer salt of
5 Herdeman a hydrated alkaline salt as taught by Painter et al and
Dychdala et al to maintain the moisture content 3-10% desired by
Herdeman as suggested by Dychdala et al using a hydrated salt to
maintain a moisture content of 3-13%.

Response to Arguments

10 As set forth above, there is inadequate evidence that the granule
of Herdeman does not have the claimed water activity. The references
are applied together and must be considered together as a whole.

Claim Rejections - 35 USC § 103

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable
15 over the references as applied to claims 17 and 27 above, and further
in view of Arnold et al (5,324,649).

The claim requires an enzyme core to comprise a seed particle
coated with an enzyme.

Arnold et al disclose producing a granule containing an enzyme
20 coated on a core particle (col 2, lines 13-39).

It would have been obvious to provide the enzyme core of Herdeman
by coating the enzyme on a particle as suggested by Arnold et al, when
using a hydrated salt as the barrier coating on the enzyme core as set
forth above.

The type of response set forth above also applies to this rejection.

Claim Rejections - 35 USC § 103

5 Claims 29-31 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Herdeman.

The claims are drawn to methods of preparing the granule.

The method for granule preparation disclosed by Herdeman is the same as presently claimed except for temperatures required by the claims. Selecting preferred optimum temperatures for preparing the granule of Herdeman would have required only limited routine experimentation and been obvious. A granule produced as disclosed by Herdeman will inherently have a higher enzyme activity than a test granule as required by claims 29 and 31.

15 *Response to Arguments*

The type of response set forth above also applies to this rejection.

Double Patenting

Claims 12-31 are rejected on the ground of nonstatutory
obviousness-type double patenting as being unpatentable over claims 1-
20 of U.S. Patent No. 6,602,841 B1. Although the conflicting claims
are not identical, they are not patentably distinct from each other
because the presently claimed granule having a protein core and
hydrated barrier and method for preparation thereof encompasses the
granule having a protein core and hydrated barrier and method for

Art Unit: 1657

preparation thereof of the patent claims, and would have been obvious from the patent claims.

Response to Arguments

Applicants state that this rejection will be addressed when
5 claims are found allowable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is
10 set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action
15 is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier
20 communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925.

Art Unit: 1657

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David M. Naff
Primary Examiner
Art Unit 1657

DMN

4/30/07